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09/773,835	01/31/2001	Paul E. Bender	PA000459	7156

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Qualcomm Incorporated  
Patents Department  
5775 Morehouse Drive  
San Diego, CA 92121-1714

EXAMINER
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ELALLAM, AHMED

ART UNIT	PAPER NUMBER
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2662

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DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/773,835

Applicant(s)

BENDER ET AL.

Examiner

AHMED ELALLAM

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 June.2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,49 and 50 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 36-48 is/are rejected.
- 7) ☒ Claim(s) 6-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119.

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 36-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 36, it is not clear what is meant by the following "selecting an open connection based in part on data traffic activity; releasing said selected open connection based on said overload condition". More specifically, it is not clear if the data traffic activity is different than the overload condition. And if that is the case the phrase "data traffic activity" should be distinguished in meaning in more precise terminology from the "overload condition". In addition, dependent claims 37-40 do not specify what the "part of data traffic activity" consist of, and that cast a doubt to a clear and precise meaning of the claimed "part of data traffic activity".

Claims 37-40 depends from rejected claim 36, thus they are subject to the same rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2662

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 23, 33, 36, 37, 39, 40-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Zellner et al, US (6,069,882).

Regarding claim 1, Zellner discloses a method in a communication system for communication of data, the method comprising:

Receiving a call request at a mobile switch (reads on detecting a request for opening a connection for a user for communication of data);

Ascertaining an available idle channel; and assigning the idle channel to the user, see abstract, column 1, lines 37-column 2, line 24. (Reads on selecting an open connection based in part on data traffic activity; releasing said selected open connection; allocating to user, communication resources corresponding to resources released based on the releasing the selected open connection). (Examiner interpreted the ascertaining an available idle channel as the claimed selecting an open connection based in part on data traffic activity, because if there were no traffic activity, there would be no need to ascertain the available idle channel).

Regarding claims 2-4, Zellner discloses allocating a vacated channel from a lower priority user to be used by the requesting higher priority user, see column 8, lines 21-26. (Reads on selected open channel is in a idle open state as in claim 2, and busy open state as in claim 3).

Regarding claim 33, Zellner discloses detecting non-availability of idle channel. See column 7, lines 60-column 8, and line 34.

Regarding claim 36, with reference to figure 2, Zellner discloses a method in a communication system for communication of data, the method comprising:

Detecting non-availability of idle channel, (reads on detecting an overload condition in said communication system);

Allocating a vacated channel from a lower priority user to the requesting user, see column 7, lines 60-column 8, and line 34. (Reads on selecting an open connection based in part on data traffic activity); releasing the selected open connection based on the overload condition). (Examiner interpreted the allocation of the vacated channel from a lower priority user to the requesting user as the claimed selecting an open connection based in part on data traffic activity, because if there is no traffic activity, any channel can be allocated to the requesting user).

Regarding claim 37, Zellner's allocation of the vacated channel is in response to the connection request. See column 7, lines 60-column 8, and line 34.

Regarding claim 41, with reference to figure 1, Zellner discloses a cell controller 18 in connection with buffer 16 comprising a plurality of queues (claimed plurality of resources and connection controllers in communication with the resource manager for making requests for allocating communication resources to a connection) and home location register 20, the cell controller for controlling the buffer 16 (reads on claimed a resource manager for managing a plurality of resources); the cell controller is a high speed general purpose computer for controlling the functions of the mobile switch 14. In

addition Zellner discloses receiving a call request at a mobile switch and ascertaining an available idle channel; and assigning the idle channel to the user, see abstract, column 1, lines 37-column 2, line 24 and column 5, lines 29-column 6, line 40. (Reads on resource manager is configured to select one of the plurality of resources based on data traffic activity; to detect a request for opening a connection for a user for communication of data, and to release one of plurality of resources for allocating, to the user, communication resources corresponding to resources released based on the release of the selected one of plurality of resources).

Regarding claim 44, Zellner discloses a method in a communication system for communication of data, the method comprising:

Receiving a call request at a mobile switch (reads on detecting a request for opening a connection for a user for communication of data), see abstract, column 1, lines 37-column 2, line 24 and column 5, lines 29-column 6, line 40.

Ascertaining an available idle channel; and assigning the idle channel to the user, see abstract, column 1, lines 37-column 2, line 24. (Reads on determining whether an open connection is in an idle open state, and selecting an open connection based in part on data traffic activity; releasing said selected open connection; allocating to user, communication resources corresponding to resources released based on the releasing). (Examiner interpreted the ascertaining an available idle channel as the claimed determining whether an open connection is in an idle open state, and selecting an open connection based in part on data traffic activity).

Regarding claims 23, 42 and 43, Zellner discloses allocating a vacated channel from a lower priority user to be used by the requesting higher priority user, see column 8, line 21-26.

Regarding claim 39 and 40, Zellner discloses allocating a vacated channel from a lower priority user to be used by the requesting higher priority user, see column 8, line 21-26.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 34, 35, 38 and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zellner.

Regarding claims 34 and 38, Zellner discloses substantially all the limitations of the respective base claims 1 and 36, except it does not disclose the overload condition is based on detecting a predetermined number of existing connections.

However, it would have been obvious to an ordinary person of skill in the art at the time the invention was made to determine overload condition in Zellner system based on a number of predetermined existing connection instead of non-available idle channels as a design choice.

Regarding claim 35, discloses substantially all the limitations of parent claim 33, except it doesn't disclose the overload condition is based on reverse link monitoring.

Examiner takes official notice that link monitoring is well known in the art. Since

Regarding claims 45 and 48, Zellner discloses a method in a communication system for communication of data, the method comprising:

Receiving a call request at a mobile switch (reads on detecting a request for opening a connection for a user for communication of data);

Ascertaining an available idle channel; and assigning the idle channel to the user, see abstract, column 1, lines 37-column 2, line 24. (Reads on selecting an open connection based on traffic activity; releasing said selected open connection; allocating to user, communication resources corresponding to resources released based on the releasing the selected open connection). (Examiner interpreted the ascertaining an available idle channel as the claimed selecting an open connection based on data traffic activity, because if there were no traffic activity, there would be no need to ascertain the available idle channel).

Zellner doesn't disclose that the selecting of the idle channel is based on grade of service assigned to the idle channel (open connection).

However, it would have been obvious to an ordinary person of skill in the art at the time the invention was made to make the idle channel selection of Zellner depends on grade of service so that call priority can be established in case of congestion.

Regarding claim 46 and 47. Zellner discloses allocating a vacated channel from a lower priority user to be used by the requesting higher priority user, see column 8, lines



21-26. (Reads on selected open channel is in a idle open state as in claim 46, and busy open state as in claim 47).

***Allowable Subject Matter***

4. Claims 5, 49 and 50 are allowed.

Claims 6-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments filed June 1, 2004 have been fully considered but they are not persuasive:

Applicants statement that claims 5-32 are rewritten in independent form is erroneous, because while claims 5, 49 and 50 are rewritten in independent form, claims 2-4, 6-32 are dependent on base claim 1.

Applicants argue that the added feature of "responsive to traffic data activity" in independent claims 1, 36, 41, 44 and 45 places the application in condition for allowance. Examiner respectfully disagree, because the added limitation can be broadly interpreted as any condition of the communication system of Zellner. Since the meaning of this limitation is vague, Examiner believes that given the broadest reasonable interpretation of the claim limitations as amended, the rejection based on Zellner above is still proper.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (703) 308-6069. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2662  
August 20, 2004



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